WEST Search History

DATE: Tuesday, June 25, 2002

Set Name side by side	Query	Hit Count	Set Name result set
DB=USPT,PGPB,JPAB,EPAB,DWPI,TDBD; PLUR=YES; OP=OR			
L24	l23 same l7	41	L24
L23	l20 or l21 or l2	2350	L23
L22	l19 adj n	304	L22
L21	l18 adj n	611	L21
L20	l18 adj2 l19	1966	L20
L19	al?sub.$	9640	L19
L18	ga?sub.$	9062	L18
L17	l15 and l6	126	L17
L16	l14 and l15	267	L16
L15	buffer	519071	L15
L14	l1 and l7	446	L14
L13	l6 same l7	45	L13
L12	buffer near l7	7	L12
L11	l1 and l6	31	L11
L10	L9	31	L10
L9	l1 and l6	31	L9
L8	l6 near l7	2	L8
L7	growth adj rate	20018	L7
L6	l3 or l4	1056	L6
L5	l3 and l4	6	L5
L4	a$2sec	773	L4
L3	angstroms$sec	289	L3
L2	angstom$3sec$4	0	L2
L1	(gallium adj nitride) or gan	10869	L1

END OF SEARCH HISTORY

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L28: Entry 55 of 256 File: USPT Jun 6, 2000

DOCUMENT-IDENTIFIER: US 6072197 A
TITLE: Semiconductor light emitting device with an active layer made of semiconductor having uniaxial anisotropy

Detailed Description Paragraph Right (37):
In this case, a growth rate of the n type A.sub.0.1 Ga.sub.0.9 N cladding layers 12, 16 is 0.6 to 5.5 .mu.m/hour, typically 2.6 .mu.m/hour; a growth rate of the GaN light guide layers 13, 15 is 0.5 to 5.2 .mu.m/hour, typically 2.4 .mu.m/hour; and a growth rate of the Ga.sub.0.9 In.sub.0.1 N active layer 14 is 0.1 to 1.5 .mu.m/hour, typically 0.6 .mu.m/hour.

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L28: Entry 196 of 256 File: USPT Mar 11, 1986

DOCUMENT-IDENTIFIER: US 4575462 A
TITLE: Method of growing an alloy film by a layer-by-layer process on a substrate, and a method of making a semiconductor device

Detailed Description Paragraph Right (4):
The results shown in FIG. 2 give periods of oscillations during growth of the GaAs and (Ga,Al)As layers of 0.51 and 0.30 seconds respectively, and these periods correspond to growth rates of 1.99 .mu.m per hour of GaAs and of 3.40 .mu.m per hour of (Ga,Al)As (these growth rates have an accuracy of .+-.0.01 .mu.m/hour). Since the lattice constants of GaAs and AlAs are similar--they only vary by about 1%, the growth rate of (Ga,Al)As is the arithmetical sum of the growth rates of GaAs and AlAs. Subtracting the GaAs growth rate from the (Ga,Al)As growth rate gives an AlAs growth rate of 1.41 .mu.m/hour. Thus the composition of the (Ga,Al)As grown was calculated to be Ga.sub.0.585 Al.sub.0.415 As. The aluminium fraction of the film 29 was found to be 0.404 when measured by surface photovoltage, and an ion gauge flux monitor (not shown) used in the growth system gave an aluminium fraction of 0.405 (these aluminium fractions were accurate to .+-.0.01).

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L29: Entry 5 of 41 File: USPT Nov 14, 2000

DOCUMENT-IDENTIFIER: US 6147363 A
TITLE: Nitride semiconductor light-emitting device and manufacturing method of the same

Detailed Description Paragraph Right (31):
After completion of the light emitting layer 102, the substrate 100 was rapidly heated from 800 to 1100.degree. C. at a temperature increase rate of 100.degree. C./minute in an argon stream. The composition of the atmosphere of the MOCVD reaction system was changed to a mixture composed of argon and hydrogen during a waiting time of one minute at 1100.degree. C., and an aluminum gallium nitride mixed crystal layer (Al.sub.0.15 Ga.sub.0.85 N) layer 103 doped with magnesium (Mg) was deposited on the light emitting layer 102. The growth rate was set to about 3 nm/minute, which was 1.5 times faster than the growth rate of the light emitting layer 102. The growth was continued for 10 minutes to obtain a mixed layer of a thickness of about 30 nm. Bis-cyclopentadienylmagnesium (bis-(C.sub.5 H.sub.5).sub.2 Mg) was used as the doping source of magnesium. The supply amount of the magnesium doping source to the MOCVD reaction system was set to 8.times.10.sup.-6 mol/min. The concentration of magnesium atoms in the Mg doped aluminum gallium nitride layer 103 was determined as about 6.times.10.sup.19 atoms/cm.sup.3 by ordinary SIMS analysis.

30 | 600